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TRO STATES IN SAN		PURITOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	PC-0025 CIP	9627
09/758,593	01/10/2001	Michael G. Walker	10 0020	
7590 05/01/2002		EXAMINER		
LEGAL DEP INCYTE GEN	ARTMENT IOMICS, INC.		LI, RUIXIANG	
3160 PORTER DRIVE PALO ALTO, CA 94304			ART UNIT	PAPER NUMBER
PALO ALTO,	Cir 772		1646	9
			DATE MAILED: 05/01/2002	/

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/758,593	WALKER, MICHAEL G.
Office Action Summary	Examin r	Art Unit
•	Ruixiang Li	1646
The MAILING DATE of this communication		
eriod for Reply		
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days, in If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by so any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a n. n. a reply within the statutory minimum of thir eriod will apply and will expire SIX (6) MON statute, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on	11 March 2002 .	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑	This action is non-final.	
3) Since this application is in condition for al closed in accordance with the practice un		
sposition of Claims		
4) Claim(s) 1-20 is/are pending in the application (a) 20 is/are pending in the application (b) 7.00 is/are pending in the application (c) 7.00 is/are pen		
4a) Of the above claim(s) <u>7-20</u> is/are withd	rawn from consideration.	
5) Claim(s) is/are allowed.		
6) Claim(s) 1-6 is/are rejected.		
7) Claim(s) is/are objected to.  8) Claim(s) <u>1-20</u> are subject to restriction a	nd/or election requirement	
oplication Papers	nu/or election requirement.	
9) The specification is objected to by the Exam	miner.	
10)⊠ The drawing(s) filed on 10 January 2001 is/		ected to by the Examiner.
Applicant may not request that any objection		
11) The proposed drawing correction filed on _	is: a) ☐ approved b) ☐ c	lisapproved by the Examiner.
If approved, corrected drawings are required in	in reply to this Office action.	
12) The oath or declaration is objected to by the	e Examiner.	
iority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for for	reign priority under 35 U.S.C.	§ 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority docum	nents have been received.	
2. Certified copies of the priority docum	ments have been received in A	pplication No
<ul> <li>3. Copies of the certified copies of the application from the Internationa</li> <li>* See the attached detailed Office action for a</li> </ul>	al Bureau (PCT Rule 17.2(a)).	•
14)☐ Acknowledgment is made of a claim for dom	nestic priority under 35 U.S.C.	§ 119(e) (to a provisional application).
a) ☐ The translation of the foreign language 15)☐ Acknowledgment is made of a claim for don	• • • • • • • • • • • • • • • • • • • •	
achment(s)	· •	
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948 Information Disclosure Statement(s) (PTO-1449) Paper No	3) 5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)

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## **DETAILED ACTION**

## Election/Restrictions

1. Applicants' election with traverse of Group I, Claims 1-6, drawn to a polynucleotide encoding an amino acid sequence of SEQ ID NO: 1 and a nucleic acid sequence of SEQ ID NO: 2, in Paper No. 8 is acknowledged. The traversal is on the ground(s) (1) that SEQ ID NO: 3-6 are fragments of SEQ ID NO: 2, whereas SEQ ID NOS: 7-10 are variants of SEQ ID NO: 2. SEQ ID NOS: 11 and 12 are not recited in the claims as they are GenBank sequences. Thus, examination of all the sequences (SEQ ID NOS: 1-10) does not constitute an undue burden on the Examiner; and (2) that Groups IV and V, Claims 7-12, drawn to methods of using the product of Group I, could be examined together with group I.

In view of applicant's argument and considering the fact that SEQ ID NO: 3-6 are fragments of SEQ ID NO: 2 and SEQ ID NOS: 7-10 are variants of SEQ ID NO: 2, the examiner will examine SEQ ID NOS: 1-10 within the scope of Group I.

Group I is related to Groups IV and V as product and process of use. They are distinct inventions for the reasons set forth in the previous Restriction Requirement (Paper No. 8). However, upon allowance of a product claim, method claims comparable in scope to the allowed product claim will be rejoined.

The requirement is made FINAL.

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2. Claims 1-20 are pending. Claims 1-6 are under consideration. All other claims are

withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being

drawn to a non-elected invention.

Objection to Disclosure

3. The disclosure is objected to because it contains an embedded hyperlink and/or other

form of browser-executable code (page 29, line 11). Applicant is required to delete

the embedded hyperlink and/or other form of browser-executable code. See MPEP §

608.01.

Information Disclosure Statement

4. The information disclosure statement filed on March 8, 2001 (paper No. 3) fails to

comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or

other information submitted for consideration by the Office. It has been placed in the

application file, but the information referred to therein has not been considered. In

order for the references to be officially considered, PTO-1449 form must be provided.

Claim Rejections—35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in

this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(a) as being anticipated by Pallavicini et al. (GenBank, Accession No. AJ304805, December 21, 2000).

Pallavicini et al. teach a nucleotide sequence—ANKRD2 cDNA sequence—comprising a nucleic acid encoding the amino acid sequence of SEQ ID NO: 1. The ANKRD2 cDNA sequence is 95.8% identical to SEQ ID NO: 2 (see attached sequence alignment). Pallavicini et al. also inherently teach a host cell comprising a vector containing ANKRD2 cDNA sequence. Thus, the nucleotide sequence taught by Pallavicini et al. meets the limitations of Claims 1, 2, 4, and 5.

## Claim Rejections—35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pallavicini et al. as applied to claims 1, 2, 4, and 5 above, and further in view of Raju (U.S. Patent No. 6,261,818, July 17, 2001, filed upon April 14, 1999).

Pallavicini et al. teach a cDNA comprising a nucleic acid sequence encoding the amino acid sequence of SEQ ID NO: 1. Pallavicini et al. fails to teach a lableing moiety in the composition of claim 3 and a method for using a host cell with an expression vector comprising the cDNA sequence to produce a protein.

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Raju teaches a cardiac-related ankyrin-repeat protein kinase. Raju also teaches a label group attached to nucleotide sequence, such as radioisotope and a fluorescent compound (column 13, 2<sup>nd</sup> paragraph). Raju further teaches a method of producing a protein. The method comprises culturing a host cell under condition in which a nucleic acid molecule is expressed and isolating the expressed protein from cell culture medium (See, e.g., claims 15-19).

Therefore, It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a labeling group in the cDNA as taught by Pallavicini et al. and to apply the method of Raju to produce the protein encoded by the cDNA taught by Pallavicini et al. with a reasonable expectation of success. One would have been motivated to do so because (1) the gene *ANKRD2* encodes a skeletal muscle ankyrin protein, as taught by Pallavicini et al.; and (2) labeled nucleotide sequence can be used in a variety of detection assays, such as to detect transcripts or genomic sequences, or to determine a precise chromosomal location of a DNA sequence, as taught by Raju (column 13, 2<sup>nd</sup> paragraph; column 43, 2<sup>nd</sup> paragraph).

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kemp et al. teach *Ankrd2*, a skeletal muscle gene coding for a stretch-responsive ankyrin-repeat protein.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruixiang Li whose telephone number is (703) 306-0282. The examiner can normally be reached on Monday-Friday, 8:30 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number

for this Group is (703) 305-3014 or (703) 308-4242.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [yvonne.eyler@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Ruixiang Li Examiner April 22, 2002 ELIZABETH KEMMERER PRIMARY EXAMINER